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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,162	01/13/2005	Kevin S. Brandt	FC-11-PUS	5437

26949 7590 04/19/2007
HESKA CORPORATION
INTELLECTUAL PROPERTY DEPT.
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EXAMINER

HOWARD, ZACHARY C

ART UNIT PAPER NUMBER

1646

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
31 DAYS	04/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/521,162	Applicant(s) BRANDT, KEVIN S.	
	Examiner Zachary C. Howard	Art Unit 1646	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 11-15 and 17-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-6, 11-15 and 17-25 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Application, Amendments and/or Claims

The preliminary amendment of 1/13/05 has been entered in full. Claims 7-10 and 16 are canceled. New claims 21-25 are added.

Claims 1-6, 11-15 and 17-25 are under consideration in the instant application.

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claims 1, 3, 5, 11, 13, 15, 17, 18 and 21-24, in so far as they are drawn to an isolated nucleic acid encoding a tick (*Rhipicephalus sanguineus*) octopamine receptor or fragment thereof (including SEQ ID NO: 30, 33, 36 and 41); complementary nucleic acid sequences (including SEQ ID NO: 32, 35, 38 and 41); variants of said nucleic acids; isolated tick octopamine proteins and variants thereof (including SEQ ID NO: 31, 34, 37 and 40), recombinant cells and viruses comprising said nucleic acids, methods of producing said proteins using said nucleic acids, and methods of detecting an inhibitor of tick octopamine receptor activity using said proteins.

Group II, claims 2, 4, 6, 12, 14, 15 and 19-24, in so far as they are drawn to an isolated nucleic acid encoding a flea (*Ctenocephalides felis*) octopamine receptor or fragment thereof (including SEQ ID NO: 1, 3, 6 and 11); complementary nucleic acid sequences (including SEQ ID NO: 2, 5, 8 and 13); variants of said nucleic acids; isolated tick octopamine proteins and variants thereof (including SEQ ID NO: 4, 7 and 12), recombinant cells and viruses comprising said nucleic acids, methods of producing said proteins using said nucleic acids, and methods of detecting an inhibitor of flea octopamine receptor activity using said proteins.

Group III, claim 25, in so far as it is drawn to an isolated antibody that binds to an tick octopamine receptor of SEQ ID NO: 31, 34, 37 or 40, or variant thereof.

Group IV, claim 25, in so far as it is drawn to an isolated antibody that binds to a flea octopamine receptor of SEQ ID NO: 4, 7 or 12, or variant thereof.

The inventions listed as Groups I-IV do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

Pursuant to 37 C.F.R. 1.475 (B-D), the ISA/US considers that where multiple products and processes are claimed, the main invention shall consist of the first invention of the category first mentioned in the claims and the first recited invention of each of the other categories related thereto. Accordingly, the main invention (Group I) comprises the first product, a tick (*Rhipicephalus sanguineus*) octopamine receptor, the method of making the product (including nucleic acids and host cells), and the first recited method of use of this product, a method of detecting an inhibitor of the receptor.

Group II does not share the same or corresponding technical feature because it is drawn to a different protein, a flea (*Ctenocephalides felis*) octopamine receptor and related nucleic acids and methods. The sequence of the flea receptor is significantly different from the tick receptor in length and amino acid composition. The full-length tick receptor of SEQ ID NO: 39 is 480 amino acids in length whereas the full-length flea receptor of SEQ ID NO: 12 is 712 amino acids in length. Therefore, the tick and flea octopamine receptor are structurally and functionally different compounds that can be made and used without each other. Lack of unity is shown because these compounds lack a common utility which is based upon a common structural feature which has been identified as the basis for that common utility.

Group III does not share the same or corresponding technical feature because Group III is drawn to an antibody, which is a structurally and functionally different compound from the polypeptide and polynucleotides of Group I or II, and which can be made and used without those compounds. Lack of unity is shown because these compounds lack a common utility which is based upon a common structural feature which has been identified as the basis for that common utility.

Group IV does not share the same or corresponding technical feature because Group IV is drawn to an antibody, which is a structurally and functionally different compound from the polypeptide and polynucleotides of Group I or II, and which can be

made and used without those compounds. Furthermore, Group IV is an antibody to a different protein than the antibody of Group III, and can be made and used without the antibody of Group III. Lack of unity is shown because these compounds lack a common utility which is based upon a common structural feature which has been identified as the basis for that common utility.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

Art Unit: 1646

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zachary C. Howard whose telephone number is 571-272-2877. The examiner can normally be reached on M-F 9:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary B. Nickol can be reached on 571-272-0835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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ELIZABETH KEMMERER
PRIMARY EXAMINER